

**To:** R8 Environmental Unit Leader[R08\_Environmental\_Unit\_Leader@epa.gov]  
**From:** OBrien, Wendy  
**Sent:** Mon 8/17/2015 9:01:00 PM  
**Subject:** FW: Gold king site question -

Wendy O'Brien, DVM, PhD, DABT  
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-----Original Message-----

From: Griffin, Susan  
Sent: Monday, August 17, 2015 8:25 AM  
To: Vandenberg, John; McKean, Deborah  
Cc: Wall, Dan; OBrien, Wendy; Phillips, Linda; Moya, Jacqueline; Flowers, Lynn  
Subject: RE: Gold king site question -

Hi John,

Thanks for the second eye on the screening values. Just fyi, Mo, Se, and Sb were not contaminants of concern at the Barker site which is why they were not in the screening levels. I see that Dan has remedied that in his last release for the Gold King.

Susan

-----Original Message-----

From: Vandenberg, John  
Sent: Friday, August 14, 2015 10:29 AM  
To: Griffin, Susan; McKean, Deborah  
Cc: Wall, Dan; OBrien, Wendy; Phillips, Linda; Moya, Jacqueline; Flowers, Lynn  
Subject: RE: Gold king site question -  
Importance: High

All -

I just left a voice message for Wendy explaining what we've been asked to do by Tom Burke.

Thanks for providing info on the bioavailability data you used.

Bottom line:

- we can essentially replicate most of the analyses performed by R8, though we typically separate child from adult derivation (the child values end up lower than adult, the R8 values are essentially an average of the two).
- there seems to be an error for the Soil/sediment (Table 2 in Susan's memo) values for vanadium and zinc: the numbers are shown as identical (Table 1 vs 2) and for sediment the screening values derived by R8 are much lower than what we derive
- for arsenic, applying the bioavailability data results in very similar values for R8 as what we get,

however, for Pb it seems that the bioavailability factor went into the numerator rather than denominator in the R8 calculations. We recommend you check the calculations for Pb.

- we were able to derive screening values for additional chemicals - we don't know why R8 did not do so for molybdenum, selenium and antimony.

I've attached the spreadsheet we've used for the evaluation. Please let me know if you'd like to discuss.

John

-----Original Message-----

From: Flowers, Lynn

Sent: Friday, August 14, 2015 11:18 AM

To: Griffin, Susan

Cc: Vandenberg, John; Wall, Dan; OBrien, Wendy

Subject: Re: Gold king site question

Thanks Susan!!!! We are helping Tom Burke and couldn't replicate arsenic and lead.... Good luck!

Sent from my iPhone

On Aug 14, 2015, at 10:49 AM, Griffin, Susan <Griffin.Susan@epa.gov> wrote:

28% RBA for lead, 24% for arsenic based on IVBA results at the Barker Hughesville and Carpenter Snowcreek sites in Montana. I'm driving to South Dakota in a few minutes so if you need to reach me please call Personal Phone/Ex. 6

From: Vandenberg, John

Sent: Thursday, August 13, 2015 4:13 PM

To: Griffin, Susan

Cc: OBrien, Wendy; Flowers, Lynn

Subject: Gold king site question

Hi Susan and Wendy,

We saw in your memo on screening levels for arsenic and lead that you used site-specific adjustments for bioavailability. Can you share with us the basis for those site-specific adjustments?

Thanks

John

Sent from my iPhone